406 used for the present experiment. A signal inputted from an input terminal 421 is inputted to a Schmitt trigger inverter 423 formed by a CMOS (complementary metal-oxide semiconductor). Specifically, the Schmitt trigger inverter 423 formed by the CMOS is the MC14584B manufactured by MOTOROLA Inc. A resistor 422 has a high resistance element that supplies a bias voltage to the input terminal 421. When there is no inducing operation at the input terminal 421, the resistor 422 makes a voltage of the input terminal 421 to a zero level. Further, the resistor 422 has high resistance in order to efficiently use an inducing voltage, whose resistance value is defined as substantially 2 MΩ. A variable resistor 424 and a resistor 425 are used for adjustment and setting of a bias level. By varying the variable resistor 424, the input level of Schmidt trigger inverter 423 can be close to a threshold level of the CMOS. This operation can adjust inducing detection sensitivity, too. A constant voltage source 426 is set to be 5 V. The output signal of Schmidt trigger inverter 423 is outputted to an output terminal 427.

[0054] Following will be explained about the operation. A signal inputted to the input terminal 421 is converted into a rectangular wave to be amplified by the Schmidt trigger inverter 423. Further, the amplified signal is inverted and is outputted to an output terminal 427 by the Schmidt trigger inverter 423.

[0055] As a result of the above experiment, a logic level signal whose shape is a rectangular wave, outputted from the signal generator 404 can be obtained from the signal output terminal 407 of FIG. 1. Further, the electrode 402 is not limited to the above-mentioned size. Namely, even when the electrode 402 is downsized, a transmitting signal can be detected.

[0056] Through such above-mentioned construction, when the user touches the electrode 402 with the finger or closely approach the electrode 402, a signal to be transmitted by way of the human body 1 can be detected that is stable over in a wide frequency area. Further, by properly setting the signal level or the detection level of the amplifier 406, the transmission signal can be detected as long as the human body 1 touches it.

[0057] FIG. 3 shows an example of a specific construction of an information transmitting system to which the present invention is applied. Like FIG. 1, the electrode 402 is mounted to the sitting surface of the chair 401 and covered with the cover 403. The signal generator 404 supplies an outputted signal to the electrode 402. An X signal detecting unit 31 and a Y signal detecting unit 32 detect an inducing voltage generated by an inputting device 2. The X signal detecting unit 31 outputs a detection result to an X signal out put terminal 46. The Y signal detecting unit 32 detects a detection result to a Y signal output terminal 47.

[0058] Following will be explained about the operation. When a user sits on the chair 401 covered with the cover 403, a signal generated at a predetermined frequency by the signal generator 404 is transmitted to the human body 1 by way of the electrode 402. When the human body 1 touches the input device 2 with the finger or approaches the device 2, an inducing voltage is generated in the input device 2 by a transmission signal transmitted by way of the human body 1. The X signal detecting unit 31 and the Y signal detecting unit 32 detect the inducing voltage generated in the input device 2. Each of the inducing voltages detected by the X signal detecting unit 31 and the Y signal detecting unit 32 is outputted from the X signal output terminal 46 and the Y signal output terminal 47.

[0059] FIG. 4 shows an example of construction of the input device 2, the X signal detecting unit 31, and the Y signal detecting unit 32. The input device 2 has linear electrodes 21Xi and 21Yi (i=1,2,3,4, . . . ) that are mutually insulated. In this example, the number of the linear electrodes 21Xi and 21Yi is arranged by four by in each of the X direction and the Y direction. Further, the X electrode detecting unit 31 and the Y electrode detecting unit 32 construct an induced voltage detecting unit 30 that includes the X electrode detecting unit 31 that detects an inducing voltage of the linear electrodes 21Xi array extended in the X direction and the Y electrode detecting unit 32 that detects an inducing voltage of the linear electrodes 21Yi array extended in the Y direction.

[0060] Here, the number of the linear electrodes 21Xi and 21Yi are respectively f our in each of the X direction and the Y direction. It is not limited to four, and the number of the linear electrodes 21Xi and 21Yi depends on a minute extent of a detection coordinate dimensioning.

[0061] FIG. 5 is a sectional view showing an example of construction of section in the X direction on the linear electrodes 21X1 of the input device 2. The linear electrodes 21Y to 21Y3 are arranged in the Y direction on a substrate 61. The linear electrodes 21Y1 to 21Y3 are covered with insulators 62Y1 to 62Y3 and are insulated against the linear electrode 21X1 arranged in the X direction. An insulator 63 is provided for protecting all the portions that may be omitted depending on the case. Further, though the surf ace is formed in a wave-shaped manner as shown, the surf ace may be formed in a flat-shaped manner.

[0062] FIG. 6 is an enlarged view of the detecting unit that detects an inducing voltage of one linear electrode 21X1 in the induced voltage detecting unit 30. The signal induced to the linear electrode 21X1 (refer to FIG. 4) of the input device 2 is supplied to an inverter buffer 42X1 by way of an input terminal 41X1. Further, an input of the inverter buffer 42X1 is e.g. grounded byway of a resistor 43X1 having high resistance such as a resistor having the value of 3.3 MΩ. One end of an LED (light emitting diode) 44X1 is connected to the output of the inverter buffer 42X1. The other end thereof is connected to a reference voltage source 46 by way of a resistor 45X1. For example, a "14049" that is a standard gate of a CMOS (complementary metal-oxide semiconductor) is available as the inverter buffer 42X1.

[0063] It is noted that because the construction of the detecting unit that detects inducing voltages of the linear electrodes 21X2 to 21X4 and 21Y1 to 21y4 of the input device 2 is substantially as same as that of the detecting unit that detects an inducing voltage of the linear electrode 21X1 shown in FIG. 6.

[0064] FIGS. 7A and 7B show a view showing waveforms of the operation of the inverter buffer 42X1. In FIG. 7A, a signal IV denotes an input signal of the inverter buffer 42X1 and a voltage VT denotes a threshold voltage of the inverter buffer 42X1. In FIG. 7B, a signal Vout denotes an output signal of the inverter buffer 42X1. A voltage VH denotes a high level portion of the output signal Vout. A voltage VL denotes a low level portion of the output signal Vout.